REMARKS

In response to the final Official Action of March 28, 2008, claims 1, 12, 16, 21, and 29 have been amended to more particularly point out and distinctly claim the invention. Minor correction has been made to the specification at page 7, line 18 to refer to "first set of characters and second set of characters", rather than "first and second character sets". This correction is clearly evident from the remaining discussion in the specification, including that at page 7, lines 7-11. Similar amendment has been made at pages 7 and 13-18. Such amendment is clear from the application as filed since an underlying stated purpose of the invention is to reduce the number of characters to display of a character set by forming two or more sets of characters, where the characters in the first set of characters are statistically more likely to be selected in successive order than the characters in the second and possibly additional sets of characters. No new matter is added.

Claim Rejections - 35 USC §102

At section 3 of the final Official Action, claims 1-5, 7, 9-16, 18, 20-24, 26, 28, and 29 are rejected under 35 USC §102(e) as unpatentable over US patent application publication 2004/0021691, Dostie, et al (hereinafter Dostie), in view of US patent 6,094,197, Buxton, et al (hereinafter Buxton).

With respect to claims 1 and 12, the Office asserts that Dostie teaches a device for inputting, which comprises a first set of characters, the first set of characters comprising at least two characters and a second set of characters, the second set of characters comprising at least two characters, wherein the characters in the first set of characters are statistically more likely to be selected in successive order than the characters in the second set of characters. The Office further asserts that Dostie does not teach the display is adapted to display, for selection of which character to input, the first set of characters, but relies upon Buxton for teaching a display adapted to display

14

the first set of characters, for selection of which character to input. Applicant respectfully disagrees.

The Present Invention

The present invention as claimed, relates to a device for inputting information which comprises a display and a memory, where the memory comprises a first set of characters of a character set, said first set of characters comprising at least two characters, and a second set of characters of said character set, said second set of characters comprising at least two characters, wherein the characters in the first set of characters are statistically more likely to be selected in successive order than the characters in the second set of characters. The present invention is further directed to wherein the display is adapted to display, for selection of which character to input, the first set of characters only.

The Office correctly points out that applicants in the remarks submitted in the response filed on December 19, 2007 at the sentence beginning at page 3, line 24 through page 4, line 9 incorrectly referred to first and second character sets in relation to the claimed invention when, in fact, what is claimed are a first and second set of characters, each of these set of characters of a character set. Thus, a character set is, as pointed out by the Office, a term known in the art which is specifically pointed out in the present application as filed, including page 4, lines 13-22, page 11, line 31 through page 12, line 12, and as shown in Figure 2a, for example.

The Cited Art

Dostie relates to a method, system, and media for entering data in a personal computing device (Dostie, paragraph [0001]), wherein a user can rapidly enter and search for data using a data entry system by entering one or more characters with a pointing device and by using a search list (Dostie, paragraph [0006]).

Buxton relates to a graphical keyboard on a digital computer (Buxton, column 1, lines 14-16), wherein the graphical keyboard responds differently to different types of pen strokes (Dostie, Abstract, column 3, lines 6-7).

As correctly pointed out by the Office, the present invention clearly draws a distinction between a set of characters and a character set, wherein a set of characters comprises characters of a character set, whereas a character set refers to characters of a language, such as English, French, German, as well as binary coded character sets, such as American Standard Code for Information Interchange (ASCII), etc.

Dostie however specifically points out at paragraph [0080] that as used in Dostie, there is no distinction between "character set" and "set of characters". Dostie, as noted above, relates to a method, system, and media for entering data in a personal computing device, wherein a user can rapidly enter and search for data using a data entry system. Specifically, as a user begins entering characters of a character sequence, a dictionary within the device of Dostie is searched for what are called "completion candidates" that the user may be attempting to input. A set of potential completion candidates are then display (Dostie, paragraph [0082]).

It is therefore clear that the present invention and that of Dostie do not relate to the same technical problem. Whereas Dostie relates to rapid text input utilizing a conventional keyboard, the objective of the claimed invention is to minimize the amount of visible characters of such a keyboard and to optimize text input. Thus, in Dostie, as a user begins selection of characters, a predicted set of next possible characters are displayed, such as by highlighting those predicted set of next possible characters on the keyboard, such as the highlighted characters on digital keyboard 28a shown in Figure 3 of Dostie.

In contrast, according to the claimed invention as set forth in amended claim 1, the characters of a character set are grouped into a first set of characters and a second set of characters in such a way that changing between the first set of characters and the second

set of characters respectively is minimized. This minimization is achieved by the claimed invention since the characters in the first set of characters are statistically more likely to be selected in successive order than the characters in the second set of characters.

Dostie does not disclose or suggest grouping, organizing, or even dividing characters of a character set into sets of characters, wherein a first set of characters contain characters that are statistically more likely to be selected in successive order than the characters in the second set of characters. Instead, in Dostie, a character set is displayed in a conventional fashion, such as shown in Figure 3 and it is only after a user begins entry of characters that Dostie creates a predicted set of next possible characters which are, for example, highlighted on the display, (see Figure 3 of Dostie showing highlighted keys).

It is therefore clear that Dostie teaches away from the claimed invention which groups the characters of a character set into a first set of characters and a second set of characters, wherein the first set of characters are statistically more likely to be selected in successive order than the characters in the second set of characters. This grouping is of course obtained through a statistical model of the character set that is being used in the device.

Thus, in response to the specific argument raised by the Office that Dostie discloses a first set of characters comprising at least two characters with reference to the highlighted characters "TYSD" as shown in Figure 3 of Dostie (paragraph [0080], lines 12-21) and a second set of characters being the remaining characters shown in Figure 3, such characters in the alleged first set of characters (characters "TYSD") are not the characters only displayed on the display (to the exclusion of the second set of characters) since all characters of the character set are also shown in Figure 3 of Dostie. In order to emphasize this distinction of the present invention over Dostie, claim 1 has been amended to particularly point out and distinctly claim that the display is adapted to display for selection of which character to input, the first set of characters only. Support for this

amendment to claim 1 is found in the application as originally filed, including Figures 2a-2c and the accompanying description, including that at page 11, line 31 through page 15, line 32.

The Office asserts that Buxton teaches a display adapted to display the first set of characters for selection of which characters to input. However, as noted above, Buxton relates to a graphical keyboard which responds differently to different types of pen strokes. Thus, for example, a lower case "a" is entered by tapping a stylist on the "a" key of a graphical keyboard, whereas an upper case "A" is entered by an upward stroke initiated over the "a" key of the graphical keyboard (Buxton, Abstract).

The Office argues that Figures 7-10 of Buxton teach that characters which are not likely to be selected are not displayed. A review of Figures 7-10 of Buxton and the corresponding discussion therefore at column 5, line 30 through column 7, line 20, makes clear that Figures 7-10 of Buxton show a series of views illustrating how a user enters input to the graphical keyboard by different types of pen strokes. The fact that the entire keyboard is not shown in these figures is merely an effect of the figures being cropped to better visualize the pen stroke actions of the invention according to Buxton.

Therefore, in contrast to the present invention, wherein the characters are divided into a first set of characters and a second set of characters, the keyboard of Figures 7-10 of Buxton should not be interpreted as <u>only</u> displaying a selected amount of characters or even a set of characters. This is also made clear from other figures in Buxton where, for example, Figure 1 illustrates a sample graphical keyboard whereas Figure 7, as stated at column 3, lines 43-45, illustrates a series of views in which a user enters a lower case character by tapping a key of <u>the graphical keyboard</u> (i.e., the keyboard shown in Figure 1).

Furthermore, the Office argues that Buxton teaches that characters which are not likely to be selected are not displayed to save display space, citing column 2, lines 42-52 of Buxton. The referenced portion of Buxton deals with the problem of modifier and

function keys which, in combination with the other keys, may take up a large portion of the screen display. Buxton solves this problem in a manner which teaches away from the present invention; namely, by an improved graphical keyboard that responds differently to different types of pen strokes and so that strokes in distinct directions can be used to express space, backspace, delete, and return characters, for example, from anywhere on the keyboard (column 4, lines 41-43). Thus, Buxton teaches away from dividing characters in a character set into a first set of characters and a second set of characters and subsequently only displaying a first set of characters on the display, wherein the first set of characters are statistically more likely to be selected in successive order than the characters in the second set of characters.

Therefore, a person skilled in the art starting from Dostie with the problem of finding an improved display for inputting characters would not arrive at the present invention as claimed by taking Buxton into consideration, since Buxton does not teach not displaying characters which are not likely to be selected, but rather simply allows the user to select certain frequently used keys, such as a space, backspace, delete, and return key from anywhere on the keyboard rather than selecting those specific keys (which may also be displayed on the graphical keyboard - see Figure 1 of Buxton).

It is therefore respectfully submitted that claim 1, as amended, is distinguished over Dostie in view of Buxton.

Independent method claim 12, independent computer program product claim 21, and independent device claim 30 have been amended in a manner similar to claim 1 and, for similar reasons, are also believed to be distinguished over Dostie in view of Buxton.
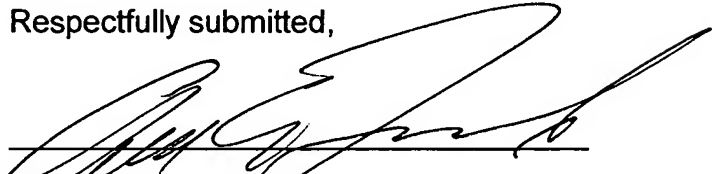
Dependent claims 2-5, 7, 9-11, 13-16, 20, 22-24, 26, and 28 are further distinguished over Dostie in view of Buxton at least in view of their dependency from independent claims which are distinguished over the cited art.

Claim Rejections - 35 USC §103

Referring now to section 4, dependent claims 6, 8, 17, 19, 25, and 27 are rejected under 35 USC §103(a) as unpatentable over Dostie in view of Buxton further in view of US patent 7,152,213, Pu, et al. Each of these claims is believed to be distinguished over the cited art in view of their dependency from independent claims which are believed to be allowable.

In view of the foregoing, it is respectfully submitted that the present application as amended is in condition for allowance and such action is earnestly solicited.

Respectfully submitted,

Dated: May 28, 2008

Alfred A. Fressola
Attorney for Applicant
WARE, FRESSOLA, VAN DER SLUYS   Registration No. 27,550
    & ADOLPHSON LLP
Bradford Green, Building Five
755 Main Street, P.O. Box 224
Monroe, CT 06468
Telephone: (203) 261-1234
Facsimile: (203) 261-5676
USPTO Customer No. 004955